



FIG. 1

MediSource

200

Dosage	Pharmacology	Side Effects	Cost	\$Comparison
Interactions	Allergies	Pregnancy	Location	Warning

Index: I albuterol

Patient Information

Name: Krane, Kevin H

Sex: Male Female

Height: FT: 5 In: 9

Total In Cm: 110

Dialysis: None

Age: 28

ID: 19099

Ideal Wt: Kg: 70 Lb: 154

Actual Wt: Kg: 50 Lb: 110

Renal Function

SCr: 1.4 mg/dl CrCl: 77 ml/min:

Liver Disease

Yes No

Hemo Peritoneal

CONCOMITANT DRUGS

zidovudine

Drug Allergies

Patient Conditions

Condition Therapy Dose Form

Pharmacy Notes

Other

Acute

Immediate Release Oral

202

204

206

208

216

210

212

214

FIG. 2

Index Drug	
FIND DRUG: <input type="text" value="CEF"/> DRUG NAMES	FIND CATEGORY: CATEGORIES
<div>ACHES-N-PAIN ACHROMYCIN V ACYCLOVIR ADVIL ALBUTEROL ALPRAZOLAM AMANTADINE AMIKACIN</div>	<div>AMEBICIDES AMINOGLYCOSIDES ANALGESICS ANTIADRENERGIC AGENTS, PERIPHERALLY ACTING ANTIBIOTICS ANTIDEPRESSANTS ANTIDIABETIC AGENTS ANTIFUNGALS</div>
<input type="button" value="OK"/>	<div><input type="button" value="CANCEL"/><input type="button" value="PREVIOUS LEVEL"/></div>

FIG. 3

MediSource

DOSAGE	PHARMACOLOGY	SIDE EFFECTS	COST	\$COMPARISON
INTERACTIONS	ALLERGIES	PREGNANCY	LACTATION	WARNING

SELECT ALL UNDER MENU SELECTION REFERENCES TO SEE DRUG INTERACTION REFERENCES

CEFTAZIDIME: DRUG INTERACTIONS

CEFTAZIDIME & GENTAMICIN:
NEPHROTOXICITY MAY BE POTENTIATED BY COADMINISTRATION OF
SOME CEPHALOSPORINS AND GETAMICIN.

PHARMACY NOTES:

FIG. 4

MediSource

DOSAGE	PHARMACOLOGY	SIDE EFFECTS	COST	\$COMPARISON
INTERACTIONS	ALLERGIES	PREGNANCY	LACTATION	WARNING

CEFTAZIDIME: DOSAGE RECOMMENDATIONS

DOSAGE RECOMMENDATION:

THE DOSE OF CEFTAZIDIME RECOMMENDED FOR THIS PATIENT WITH PYELONEPHRITIS IS 1 - 2 GRAM(S) INTRAVENOUSLY EVERY 8 HOURS. IF NECESSARY, THIS DOSE MAY BE ADMINISTERED INTRAMUSCULARLY.

ONCE THE PATIENT IS STABLE AND ABLE TO TOLERATE ORAL MEDICATION, ORAL ANTIBIOTICS MAY BE SUBSTITUTED ACCORDING TO MICROBIOLOGY SENSITIVITY DATA.

THERAPY SHOULD BE CONTINUED FOR ABOUT 14 DAYS, DEPENDING ON THE NATURE AND SEVERITY OF THE INFECTION.

THE END.

PHARMACY NOTES:

FIG. 5

DOSAGE	PHARMACOLOGY	SIDE EFFECTS	COST	\$COMPARISON
INTERACTIONS	ALLERGIES	PREGNANCY	LACTATION	WARNING

INTERACTIONS	REFERENCES	REFERENCES
See also: ...	See also: ...	See also: ...

ACEETAZIDIME: PHARMACOLOGY AND PHARMACOKINETICS

PHARMACOLOGY:

CEPTAZIDIME IS A THIRD GENERATION CEPHALOSPORIN. THE MECHANISM OF ACTION IS INHIBITION OF BACTERIAL CELL WALL SYNTHESIS.

CEFTAZIDIME IS ACTIVE AGAINST A VARIETY OF GRAM POSITIVE, GRAM NEGATIVE AND ANAEROBIC ORGANISMS, HOWEVER IT IS FREQUENTLY USED ONLY FOR THE TREATMENT OF GRAM NEGATIVE INFECTIONS. THIS DRUG IS COMMONLY USED FOR TREATMENT OF INFECTIONS CAUSED BY *PSEUDOMONAS AERUGINOSA*. MOST STRAINS OF THIS ORGANISM ARE INHIBITED BY CEFTAZIDIME CONCENTRATIONS OF 0.5 - 1 mg/L. OTHER ORGANISMS AGAINST WHICH CEFTAZIDIME IS ACTIVE INCLUDE *HAEMOPHILUS INFLUENZAE*, *KLEBSIELLA PNEUMONIAE*, AND *ENTEROBACTER*.

IT IS USED FOR A VARIETY OF INFECTIONS INCLUDING MENINGITIS, FEBRILE NEUTROPENIA, OSTEOMYELITIS, PNEUMONIA AND PYELONEPHRITIS.

CETAZIDIME: PHARMACOLOGY REFERENCES

CEFTAZIDIME: PHARMACOKINETICS OF CEFTAZIDIME IN NORMAL AND UREMIC SUBJECTS.

LAROY, J., LEGUY, F., BORSA, F., ET AL. PHARMACOKINETICS OF ANTIMICROBIAL AGENTS'S CHEMOTHER 1984;25:638-42.

ANTIMICROB AGENTS CHEMOTHER 1984;25:838-42.
KEYWORD: CLEARANCE, DOSE, ELIMINATION, HALF LIFE, VOLUME.

PHARMACOKINETICS OF CEFTAZIDIME IN PATIENTS WITH RENAL INSUFFICIENCY.

WELAGE LS, SCHULTZ RW, SCHENTAG J. PHARMACOKINETIC AND MICROBIOLOGIC AGENTS CHEMOTHER. 1984; 25:201-4.

ANTIMICROB AGENTS CHEMOTHER 1984; 25:201-4.
KEYWORD: CLEARANCE, DOSE, ELIMINATION, HALF LIFE, VOLUME.

LEEDER JS, SPINO M, ISLES AF, ET AL. CEFTAZIDIME DISPOSITION IN ACUTE AND STABLE CYSTIC FIBROSIS. CLIN PHARMACOL THER 1984; 36:355-62

6
F/G.

MediSource				
270				
DOSAGE	PHARMACOLOGY	SIDE EFFECTS	COST	\$COMPARISON
INTERACTIONS	ALLERGIES	PREGNANCY	LACTATION	WARNING
SELECT LEVEL ONE TO SEE LEVEL TWO SIDE EFFECTS.				
CEFTAZIDIME: SIDE EFFECTS				
SIDE EFFECTS LEVEL 2				
THE MOST COMMON ADVERSE EFFECT OF CEFTAZIDIME THERAPY IS EOSINOPHILIA, WHICH IS USUALLY MILD AND RETURNS TO NORMAL SHORTLY AFTER DISCONTINUATION OF THERAPY. OTHER TRANSIENT HEMATOLOGIC EFFECTS, SUCH AS THROMBOCYTOPENIA, THROMBACYTHEMIA AND LEUKOPENIA, HAVE BEEN SEEN BUT ARE MUCH LESS COMMON.				
THE END.				
274				
CEFTAZIDIME: SIDE EFFECTS REFERENCES				
SHIMADA K, MATSUDA T, INAMATSU T, URAYAMA K. BLEEDING SECONDARY TO VITAMIN K DEFICIENCY IN PATIENTS RECEIVING PARENTERAL CEPHEM ANTIBIOTICS. J ANTIMICROB CHEMOTHER 1984;14:325-30.				
GENTRY LO. ANTIMICROBIAL ACTIVITY, PHAMACOKINETICS, THERAPEUTIC INDICATIONS AND ADVERSE REACTIONS OF CEFTAZIDIME. PHARMACOTHER 1985;5:254-67.				
LJUNGBERG B, NILSSON-EHLE I. COMPARATIVE PHARMACOKINETICS OF CEFTAZIDIME IN YOUNG, HEALTHY AND ELDERLY, ACUTELY ILL MALES. EUR J CLIN PHARMACOL 1988;34:179-86.				

FIG. 7

MediSource

280

DOSAGE	PHARMACOLOGY	SIDE EFFECTS	COST	\$COMPARISON
INTERACTIONS	ALLERGIES	PREGNANCY	LACTATION	WARNING

CEFTAZIDIME: COST

282

THE DAILY COST OF CEFTAZIDIME 2 GRAM(S) I.V. EVERY 8 HOURS AT MEDISOURCE GENERAL HOSPITAL IS \$47.88.

THE DAILY COST OF CEFTAZIDIME 1 GRAM(S) I.V. EVERY 8 HOURS AT MEDISOURCE GENERAL HOSPITAL IS \$23.94.

THE END.

PHARMACY NOTES:

FIG. 8

MediSource				
				290
DOSAGE	PHARMACOLOGY	SIDE EFFECTS	COST	\$COMPARISON
	ALLERGIES			WARNING
DRUGS FOR PYELONEPHRITIS				
DRUG	DAILY COST	DOSAGE		
GENTAMICIN	\$2.76	130 mg I.V. EVERY 24 HOURS		
AMIKACIN	\$58.82	510 mg I.V. EVERY 24 HOURS		
AMPICILLIN	\$1.68	1 GRAM(S) I.V. EVERY 6 HOURS		
CEFAZOLIN	\$3.14	1 GRAM(S) I.V. EVERY 12 HOURS		
CEFAZOLIN	\$6.28	2 GRAM(S) I.V. EVERY 12 HOURS		
CEFMETAZOLE	\$8.94	1.50 GRAM(S) I.V. EVERY 12 HOURS		
CEFOXITIN	\$70.80	1 GRAM(S) I.V. EVERY 8 HOURS		
CEFOXITIN	\$70.80	2 GRAM(S) I.V. EVERY 8 HOURS		
CEFTAZIDIME	\$15.96	1 GRAM(S) I.V. EVERY 12 HOURS		
CEFTAZIDIME	\$31.82	2 GRAM(S) I.V. EVERY 12 HOURS		
CEFTRIAXONE	\$36.92	1 GRAM(S) I.V. EVERY 12 HOURS		
CIPROFLOXACIN	\$28.82	200 mg I.V. EVERY 12 HOURS		
CIPROFLOXACIN	\$57.64	400 mg I.V. EVERY 12 HOURS		
IMIPENEM	\$20.34	0.25 GRAM(S) I.V. EVERY 8 HOURS		
OFLOXACIN	\$14.00	200 mg I.V. EVERY 24 HOURS		
OFLOXACIN	\$14.00	400 mg I.V. EVERY 24 HOURS		
PIPERACILLIN	\$18.96	2 GRAM(S) I.V. EVERY 6 HOURS		
PIPERACILLIN	\$28.44	3 GRAM(S) I.V. EVERY 6 HOURS		

FIG. 9

U.S. PATENT & TRADEMARK OFFICE

Conditions	
WHAT FORM OF ALBUTEROL?	
CONDITION	OTHER
ASTHMA	
THERAPY	DOSING FORM
ACUTE	NEBULIZED
PROPHYLAXIS	METERED-DOSE INHALER
	ROTACAP
	IMMEDIATE RELEASE ORAL
	SUSTAINED RELEASE ORAL

CANCEL

FIG. 10

310

INPATIENT ORDER

PATIENT: KRANE, KEVIN H

ID: 19099

AGE: 28

ROOM: 175 WEST ROOM 10

DATE: NOV 17 1993

TIME: 15:35

PREVIOUS ORDERS

312

DATE	TIME	PHYSICIAN'S ORDERS
10/20/93	10:00	MEDICATIONS:
		TYLENOL 250 mg PO PM PAIN
		PENICILLIN 250 mg IV EVERY 8 HRS.

CURRENT ORDER

316

EXPERT SERVICE DOSED

MEDICATIONS
GENTAMICIN 130 mg INTRAVENOUSLY EVERY 8 HOURS

320

314

☐ STAT ☐ FIRST DOSE NOW ☐ MAKE PRN ☐ NO GENERIC

318

ADD...

SEND

322

CHANGE

DELETE

CANCEL

FIG. 11

ACYCLOVIR TREE

CASE	CONDITION	SUBCONDITION	DOSAGE FORM	DIALYSIS	CrCl	LIVER OX
1	HERPES SIMPLEX	MUCOCUTANEOUS	INTRAVENOUS	NONE	> =80.	NO
2		IMMUNOCOMPRO-				YES
3		MISED HOST			50-79.9.	NO
4						YES
5					25-49.9.	NO
6						YES
7					10-24.9.	NO
8						YES
9					<10	NO
10						YES
11				HEMODIALYSIS		NO
12						YES
13				PERITONEAL		NO
14						YES
15			ORAL	NONE	> =80.	NO
16						YES
17					50-79.9.	NO
18						YES
19					25-49.9.	NO
20						YES
21					10-24.9.	NO
22						YES
23					<10	NO
24						YES
25				HEMODIALYSIS		NO
26						YES
27				PERITONEAL		NO
28						YES
29		MUCOCUTANEOUS	ORAL	NONE	> =80.	NO
30		IMMUNOCOMPE-				YES
31		TENT HOST			50-79.9.	NO
32						YES
33					25-49.9	NO
34						YES
35					10-24.9.	NO
36						YES
37					<10	NO
38						YES
39				HEMODIALYSIS		NO
40						YES
41				PERITONEAL		NO
42						YES
43		PROPHYLAXIS	ORAL	NONE	> =80.	NO
44						YES
45					50-79.9.	NO
46						YES
47					25.49.9	NO
48						YES

FIG. 12

ACYCLOVIR TREE

49					10-24.9.	NO
50						YES
51					<10	NO
52						YES
53				HEMODIALYSIS		NO
54						YES
55				PERITONEAL		NO
56						YES
57	HERPES SIMPLEX		INTRAVENOUS	NONE	> =80.	NO
58	ENCEPHALITIS					YES
59					50-79.9.	NO
60						YES
61					25-49.9.	NO
62						YES
63					10-24.9.	NO
64						YES
65					<10	NO
66						YES
67				HEMODIALYSIS		NO
68						YES
69				PERITONEAL		NO
70						YES
71	VARICELLA-ZOSTER		INTRAVENOUS	NONE	> =80.	NO
72						YES
73					50-79.9.	NO
74						YES
75					25-49.9	NO
76						YES
77					10-24.9.	NO
78						YES
79					<10	NO
80						YES
81				HEMODIALYSIS		NO
82						YES
83				PERITONEAL		NO
84						YES
85			ORAL	NONE	> =80.	NO
86						YES
87					50-79.9.	NO
88						YES
89					25.49.9.	NO
90						YES
91					10-24.9.	NO
92						YES
93					<10	NO
94						YES
95				HEMODIALYSIS		NO
96						YES
97				PERITONEAL		NO

FIG. 13

ACYCLOVIR TREE

98						YES
99	OTHER		INTRAVENOUS	NONE	> =80.	NO
100						YES
101					50-79.9.	NO
102						YES
103					25-49.9.	NO
104						YES
105					10-24.9.	NO
106						YES
107					<10	NO
108						YES
109				HEMODIALYSIS		NO
110						YES
111				PERITONEAL		NO
112						YES
113			ORAL	NONE	> =80.	NO
114						YES
115					50-79.9.	NO
116						YES
117					25-49.9.	NO
118						YES
119					10-24.9.	NO
120						YES
121					<10	NO
122						YES
123				HEMODIALYSIS		NO
124						YES
125				PERITONEAL		NO
126						YES

FIG. 14

ACYCLOVIR- DECISION TREE

ACYCLOVIR IS AVAILABLE FOR PARENTERAL USE, AND AS 200 MG CAPSULES AND 800 mg TABLETS.

TOP LEVEL TEXT

DOSAGE RECOMMENDATION

THE DOSAGE OF ACYCLOVIR RECOMMENDED FOR THIS PATIENT (CONDITION) IS (DOSE) mg (ROUTE) (FREQUENCY). (INTRAVENOUS ADMIN) (SWITCH) (DURATION) (DIALYSIS STATEMENT)

(RENAL FAILURE DOSE)

(SPECIAL STATEMENT)

RESISTANCE TO ACYCLOVIR IS BEING SEEN AMONG ISOLATES OF HERPES SIMPLAX VIRUS AND VARICELLA-ZOSTER VIRUS. THESE ISOLATES WOULD BE EXPECTED TO BE RESISTANT TO GANCICLOVIR AS WELL, BUT MAY BE SUSCEPTIBLE TO VIDARABINE AND FOSCARNET.

PHARMACOLOGY

ACYCLOVIR IS AN ANTIVIRAL AGENT WHICH IS CONVERTED INTRACELLULARLY TO ACTIVE ACYCLOVIR TRIPHOSPHATE. ACYCLOVIR TRIPHOSPHATE INTERFERES WITH VIRAL DNA SYNTHESIS AND INHIBITS VIRAL REPLICATION.

ACYCLOVIR IS USEFUL IN THE TREATMENT OF INFECTIONS DUE TO HERPES SIMPLEX VIRUS AND VARICELLA-ZOSTER VIRUS.

RESISTANCE TO ACYCLOVIR IS BEING SEEN AMONG ISOLATES OF HERPES SIMPLEX VIRUS AND VARICELLA-ZOSTER VIRUS. THESE ISOLATES WOULD BE EXPECTED TO BE RESISTANT TO GANCICLOVIR AS WELL, BUT MAY BE SUSCEPTIBLE TO VIDARABINE AND FOSCARNET.

PHARMACOKINETICS

THE BIOAVAILABILITY OF ACYCLOVIR IS POOR, RANGING FROM 15 TO 30%.

THE PLASMA PROTEIN BINDING OF ACYCLOVIR AVERAGES 15%.

THE VOLUME OF DISTRIBUTION AVERAGES 0.7 L/kg IN PATIENTS WITH NORMAL RENAL AND HEPATIC FUNCTION. (RENAL Vd) (cns PENETRATION)

PLASMA CLEARANCE OF ACYCLOVIR RANGES FROM 3.0 TO 4.7 ml/min/kg IN PATIENTS WITH NORMAL RENAL AND HEPATIC FUNCTION. (RENAL Cl)

FIG. 15

THE ELIMINATION HALF LIFE IN PATIENTS WITH NORMAL RENAL AND HEPATIC FUNCTION RANGES FROM 2 TO 3 HOURS. (RENAL HALF LIFE)

RENAL EXCRETION IS THE MAJOR ROUTE OF ELIMINATION OF ACYCLOVIR WITH 70 TO 80% EXCRETED UNCHANGED VIA GLOMERULAR FILTRATION AND TUBULAR SECRETION.

THE ONLY SIGNIFICANT METABOLITE THAT HAS BEEN ISOLATED IS 9-CARBOXYMETHOXYMETHYLGUANINE WHICH ACCOUNTS FOR 9 TO 14% OF AN ADMINISTERED DOSE AND IS NOT ACTIVE.

(LIVER PKS)

(DIALYSIS PKS)

FILL IN TEXT

* DOSES ARE CALCULATED AS mg/kg AND ROUNDED TO THE NEAREST 25 mg. EG: $10 \text{ mg/kg} \times 73 \text{ kg} = 730 \text{ mg}$ ROUNDED TO 725 mg.

CASE: 71-74

DOSE, 10 TO 12 mg/kg
ROUTE: INTRAVENOUSLY
FREQUENCY: EVERY 8 HOURS

CASE: 75-76

DOSE: 10 TO 12 mg/kg
ROUTE: INTRAVENOUSLY
FREQUENCY: EVERY 12 HOURS

CASE: 77-78.

DOSE: 5 TO 6 mg/kg
ROUTE: INTRAVENOUSLY
FREQUENCY: EVERY 12 HOURS

CASE: 79-84

DOSE: 5 TO 6 mg/kg
ROUTE: INTRAVENOUSLY
FREQUENCY: EVERY 24 HOURS

FIG. 16

CASS: 1-4

DOSE: 5 mg/kg
ROUTE: INTRAVENOUSLY
FREQUENCY: EVERY 8 HOURS

CASE: 5.6.

DOSE: 5 mg/kg
ROUTE: INTRAVENOUSLY
FREQUENCY: EVERY 12 HOURS

CASE: 7.8.

DOSE: 5 mg/kg
ROUTE: INTRAVENOUSLY
FREQUENCY: EVERY 24 HOURS

CASE: 9-14

DOSE: 2.5 mg/kg
ROUTE: INTRAVENOUSLY
FREQUENCY: EVERY 24 HOURS

CASE: 15-18,29-32.

DOSE: 200
ROUTE: ORALLY
FREQUENCY: FIVE TIMES A DAY

CASE: 19-28,33-42.

CASE:200
ROUTE: ORALLY
FREQUENCY: THREE TIMES A DAY

CASE: 85-88

DOSE: 800
ROUTE: ORALLY
FREQUENCY: FIVE TIMES A DAY

CASE: 89-92.

DOSE: 800
ROUTE: ORALLY
FREQUENCY: EVERY 8 HOURS

FIG. 17

CASE: 93-98

DOSE: 800
ROUTE: ORALLY
FREQUENCY: EVERY 12 HOURS

CASE: 113-116.

DOSE: 200 TO 800
ROUTE: ORALLY
FREQUENCY: FIVE TIMES A DAY

CASE: 117-120.

DOSE: 200 TO 800
ROUTE: ORALLY
FREQUENCY: EVERY 8 HOURS

CASE: 121-126.

DOSE: 200 TO 800
ROUTE: ORALLY
FREQUENCY: EVERY 12 HOURS

CASE: 99-102.

DOSE: 5 mg/kg TO 12 mg/kg
ROUTE: INTRAVENOUSLY
FREQUENCY: EVERY 8 HOURS

CASE : 103-104.

DOSE: 5 mg/kg TO 12 mg/kg
ROUTE: INTRAVENOUSLY
FREQUENCY: EVERY 12 HOURS

CASE: 105-106.

DOSE: 2.5 mg/kg TO 6 mg/kg
ROUTE: INTRAVENOUSLY
FREQUENCY: EVERY 12 HOURS

FIG. 18

CASE: 107-112 -

DOSE: 2.5 mg/kg TO 6 mg/kg
ROUTE: INTRAVENOUSLY
FREQUENCY: EVERY 24 HOURS

CASE: 43-46

DOSE: 400 mg
ROUTE: ORALLY
FREQUENCY: TWICE DAILY

CASE: 46-56

DOSE: 400 mg
ROUTE: ORALLY
FREQUENCY: ONCE DAILY

CASE: 57-60

DOSE: 12 mg/kg
ROUTE: INTRAVENOUSLY
FREQUENCY: EVERY 8 HOURS

CASE: 61 -62

DOSE: 12 mg/kg
ROUTE: INTRAVENOUSLY
FREQUENCY: EVERY 12 HOURS

CASE: 63-64

DOSE: 6 mg/kg
ROUTE: INTRAVENOUSLY
FREQUENCY: EVERY 12 HOURS

CASE: 65-70

DOSE: 6 mg/kg
ROUTE: INTRAVENOUSLY
FREQUENCY: EVERY 24 HOURS

FIG. 19

CASE: 1.2.57.58.71.72.99.100.

INTRAVENOUS ADMIN: ACYCLOVIR SHOULD BE ADMINISTERED OVER ONE HOUR AND THE PATIENT SHOULD BE ADEQUATELY HYDRATED TO PREVENT CRYSTALLIZATION OF ACYCLOVIR IN THE RENAL TUBULES.

CASE: 3-14.59-70.73-84.101-112.

INTRAVENOUS ADMIN: ACYCLOVIR SHOULD BE ADMINISTERED OVER ONE HOUR AND THE PATIENT SHOULD BE ADEQUATELY HYDRATED TO PREVENT CRYSTALLIZATION OF ACYCLOVIR IN THE RENAL TUBULES. THIS IS ESPECIALLY IMPORTED IN THIS PATIENT WITH DECREASED RENAL FUNCTION.

CASE: 1-42

CONDITION: WITH A HERPES SIMPLEX INFECTION
DURATION: THERAPY SHOULD BE CONTINUED FOR ABOUT 10 DAYS DEPENDING ON THE NATURE AND SEVERITY OF THE INFECTION.

CASE: 43-56

CONDITION: REQUIRING PROPHYLAXIS AGAINST HERPES SIMPLEX INFECTION

CASE: 57-70

CONDITION: WITH HERPES SIMPLEX ENCEPHALITIS
DURATION: THERAPY SHOULD BE CONTINUED FOR ABOUT 10 DAYS OR LONGER DEPENDING ON THE NATURE AND SEVERITY OF THE INFECTION.

CNS PENETRATION: RATS TREATED WITH ACYCLOVIR, 25 mg/kg GIVEN SUBCUTANEOUSLY, DEMONSTRATED PEAK BRAIN TISSUE CONCENTRATION AT 20 MINUTES TO ONE HOUR WHICH WERE 30% OF CONCURRENT BLOOD CONCENTRATIONS.

CASE: 71-84.

CONDITION: WITH A VARICELLA- ZOSTER INFECTION
DURATION: THERAPY SHOULD BE CONTINUED FOR ABOUT 7 TO 10 DAYS DEPENDING ON THE NATURE AND SEVERITY OF THE INFECTION.

CASE : 99-126

CONDITION: WITH A VIRAL INFECTION
DURATION: THERAPY SHOULD BE CONTINUED FOR ABOUT 10, DEPENDING ON THE NATURE AND SEVERITY OF THE INFECTION.

FIG. 20

CASE: 5-14,19-28, 33-42, 47-56, 61-70, 75-84, 89-98, 103-112, 117-126

RENAL FAILURE DOSE: BECAUSE ACYCLOVIR UNDERGOES RENAL ELIMINATION, THE NORMALLY RECOMMENDED DOSE HAS BEEN ADJUSTED FOR THIS PATIENT'S RENAL DYSFUNCTION.

CASE: ALL EVENS

LIVER pks: THERE ARE NO DATA ON THE PHARMACOKINETIC DISPOSITION OF ACYCLOVIR IN PATIENTS WITH LIVER DISEASE, HOWEVER, LITTLE ALTERATION WOULD BE EXPECTED.

CASE: ALL EXCEPT 1,2,15,16,29,30,43,44,57-58,71,72,85,86,99,100,113,114

RENAL vd: A SLIGHT BUT SIGNIFICANT DECREASE EXISTS FOR PATIENTS WITH RENAL IMPAIRMENT AVERAGING 0.59 L/kg (ASSUMING 70 kg BODY WEIGHT).

RENAL Cl: IN PATIENTS WITH END STAGE RENAL DISEASE THE PLASMA CLEARANCE DECREASES TO APPROXIMATELY 0.4 ml/min/kg.

RENAL HALF LIFE: IN PATIENTS WITH END STAGE RENAL DISEASE THIS INCREASES TO APPROXIMATELY 20 HOURS.

CASE. 11,12,25,26,39,40,53,54,67,68,81,82,95,96,109,110,123,124

DIALYSIS pks: ACYCLOVIR PLASMA CONCENTRATIONS ARE REDUCED APPROXIMATELY 60% FOLLOWING 6 HOURS OF HEMODIALYSIS. DIALYSIS CLEARANCE MEASURED 82 ml/min AND THE HALF LIFE DECREASED FROM 20 HOURS OFF DIALYSIS TO APPROXIMATELY 6 HOURS WHILE ON DIALYSIS.

DIALYSIS STATEMENT ACYCLOVIR IS DIALYZED BY HEMODIALYSIS. DOSES SHOULD BE SCHEDULED TO FOLLOW DIALYSIS SESSIONS OR SUPPLEMENTAL DOSES EQUIVALENT TO THE MAINTENANCE DOSE SHOULD BE GIVEN.

CASE: 13,14,27,28,41,42,55,56,69,70,83,84,97,98,111,112,125,126

DIALYSIS pks: IN PATIENTS MANAGED WITH CONTINUOUS AMBULATORY PERITONEAL DIALYSIS (CAPD), THE DIALYSIS CLEARANCE RANGES FROM 3.6 TO 4.4 ml/min WITH 10 TO 12% OF A DOSE RECOVERED IN THE DIALYSATE OVER 24 HOURS.

CASE: 1-14,57-70,71-84,99-112

SWITCH: ONCE THE PATIENT IS STABLE AND ABLE TO TOLERATE ORAL MEDICATIONS ORAL THERAPY MAY BE SUBSTITUTED TO COMPLETE THERAPY.

SPECIAL STATEMENT:

CASE: 57-70

ACYCLOVIR IS MORE EFFECTIVE AND LESS TOXIC THAN VIDARABINE FOR HERPES SIMPLEX VIRUS ENCEPHALITIS.

CASE: 29-42

FOR GENITAL HERPES SIMPLEX VIRUS INFECTIONS, ACYCLOVIR IS EFFECTIVE IN TREATMENT OF PRIMARY INFECTION TO REDUCE DURATION OF PAIN, NEW LESION FORMATION, AND VIRAL SHEDDING, THERE IS ONLY MODEST BENEFIT IN THE TREATMENT OF RECURRENT HERPES SIMPLEX EPISODES WITH SHORTENING OF LESION DURATION BY ONLY 24 TO 48 HOURS.

CASE: 43-56

PROPHYLACTIC TREATMENT WITH ACYCLOVIR IS USEFUL IN IMMUNOCOMPROMISED PATIENTS AND PATIENTS WITH FREQUENT AND SEVERE REOCCURANCES.

CASE: 71-98

VARICELLA-ZOSTER INFECTIONS ARE MORE SERIOUS IN IMMUNOCOMPROMISED HOSTS. FOR PRIMARY VARICELLA-ZOSTER INFECTIONS IN IMMUNOCOMPROMISED HOSTS, TREATMENT WITH INTRAVENOUS ACYCLOVIR REDUCES THE INCIDENCE OF VARICELLA-ZOSTER VIRUS PNEUMONIA. FOR REACTIVATION OF VARICELLA-ZOSTER VIRUS IN IMMUNOCOMPROMISED PATIENTS, ACYCLOVIR DECREASES THE INCIDENCE OF SEVERE PROGRESSION OF DISEASE (VISCERAL OR SEVERE CUTANEOUS DISSEMINATION) WHEN GIVEN INTRAVENOUSLY. IN NORMAL SUBJECTS ORAL ACYCLOVIR DECREASES THE INCIDENCE OF EARLY PAIN BUT NOT THE INCIDENCE OF SEVERE POSTHERPETIC NEURALGIA, AND REDUCES DURATION OF THE RASH. OPHTHALMIC VARICELLA-ZOSTER WARRANTS TREATMENT WITH ACYCLOVIR GIVEN THE ASSOCIATED MORBIDITY.